

Abstract

A method for quantitatively assaying one or more target molecules in a sample includes, in one embodiment:

adding a preparation of a nucleic acid aptamer, specific for each target molecule to a first sample;

allowing substantially all of the target molecules in the first sample to bind with the aptamer;

separating unbound aptamer from the first sample by contacting the sample of the previous step with immobilized ligands, whereby the ligands bind to the unbound aptamer, thereby recovering an aliquot from the first sample of aptamer bound to target molecules; and

using a quantitative replicative procedure to determine a quantity of aptamer specific for each molecule related to the concentration of aptamer in the aliquot and therefore related to the concentration of target molecule in the sample.